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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/717,495	11/20/2000	Michael A. Fischer	213.302	8490
22897	7590	12/12/2003	EXAMINER	
DEMONT & BREYER, LLC SUITE 250 100 COMMONS WAY HOLMDEL, NJ 07733			CHANDRASEKHAR, PRANAV	
			ART UNIT	PAPER NUMBER
			2185	7
DATE MAILED: 12/12/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/717,495

Applicant(s)

FISCHER, MICHAEL A.

Examiner

Pranav Chandrasekhar

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/20/2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 5-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Lines 15-17 of claim 1 state that the frequency of function clock signal must be selectively forced to be equal to the source clock frequency for the duration of the function clock signal in which the predetermined instruction is decoded. This is in conflict with lines 13-14 of claim 1, which state that the frequency of function clock signal can be selectively changed only after the predetermined instruction has been decoded.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2,3,11-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowell et al [US Pat No. 3,623,017] in view of Hofmann et al [US Pat No. 6504854].

3. As per claims 1,3,12 and 14, Lowell teaches:

an instruction store containing instructions at addresses [col. 2 lines 22-25; 10 Fig. 1];

a program counter connected to the instruction store and receptive of the function clock signal to create address signals and increment the address signals to address the instructions in the instruction store [col. 2 lines 44-50; col. 3 lines 43-44 ;26 Fig.1];

an instruction decoder connected to the instruction store for decoding the instructions [col. 2 lines 55-60; 30 Fig.1];

a function clock generator (Fig 3) for generating a function clock signal, the function clock generator connected to the program counter and causing the program counter to address a predetermined instruction which when decoded selectively changes the clock frequency for the duration in which the instruction is executed [col. 3 lines 12-25; col. 2 lines 43-44; 38 Fig. 1].

Lowell does not explicitly teach instructions to perform I/O transfers of bit signals at a source clock frequency.

Hofmann teaches:

I/O transfers of bit signals at a source clock frequency. [col. 5 lines 38-47; col. 4 lines 44-46; Fig. 1]

It would have been obvious to one skilled in the art to combine the teachings of Lowell and Hofmann in order to change the frequency of function clock signal to that of a source clock frequency when the instruction being executed relates to I/O transfers.

4. As per claims 2 and 13, Lowell does not explicitly teach an instruction functionally causing the transfer of a single bit signal to or from an interface.

Hofmann teaches the transfer of a single bit signal to or from an interface. [col. 5 lines 38-47; Fig.1; Fig. 5]. The transfer of the bit signal is viewed as the result of the execution of a predetermined instruction.

5. As per claims 11 and 16, Lowell and Hofmann do not explicitly teach a delay instruction forcing the frequency of function clock signal to equal that of the source clock frequency for a predetermined number of sequential executions of the predetermined delay instruction.

It would have been obvious to one skilled in the art that the opcode of a delay instruction can change the frequency of the function clock in a manner similar to that of an I/O instruction as mentioned earlier.

6. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowell et al [US Pat No. 3,623,017] in view of Hofmann et al [US Pat No. 6,504,854] as applied to claim 1 above and further in view of Touriguian et al [US Pat No. 5,832,257].

Lowell and Hofmann do not explicitly teach the use of a repeat counter connected to the instruction decoder to repeat the execution of a predetermined instruction once during a predetermined period of the clock source signal.

Touriguian teaches a repeat counter connected to the instruction decoder whereby a number is loaded into the repeat counter indicating how many times the execution of a predetermined instruction must be repeated. [col. 17 lines 16-30].

It would have been obvious to one skilled in the art to combine the teachings of Lowell and Hofmann with those of Touriguian to load a repeat counter with a number such that the execution of the predetermined instruction is repeated once and thus avoid decoding a separate consecutive instruction to repeat the same operation as that of the predetermined instruction.

Allowable Subject Matter

7. Claims 5-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pranav Chandrasekhar whose telephone number is 703-305-8647. The examiner can normally be reached on 8:30 a.m.-5:00 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 703-305-9717. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2100.

Pranav Chandrasekhar
December 5, 2003



THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100